New Jersey

The cornerstone of New Jersey's ground water management and protec tion activities is the state ground water discharge permit program pursuan to the New Jersey Clean Water Act of 1976. A simplistic aquifer classifica tion system based on total dissolved solids (TDS) has been put into place a one of the factors that is considered in the setting of effluent limitations. Th< classification system has not been used as a proactive aquifer mapping tool with the exception of the Central Pine Barrens area, rather it is used on j site-specific basis as one of the factors that determine permit limits. Th< data gathering is simple, as the classifications are based either on TDS level and are easily determined for a given site, or on geographical boundaries fo: the Pine Barrens area of the state.

In actual practice, the New Jersey classification system has not been use fuL Of the approximately 500 ground water discharge permits issued sinc< 1981 by the New Jersey Department of Environmental Protection (DEP) virtually all have been issued in class GW2 or the fresh water (TDS of 50(ppm or less) classification category. The DEP is currently evaluating th< potential usefulness of various more-sophisticated classification systems anc plans to put into place a different system by early 1987.

The present classification system was developed in 1981 under the provi sions of New Jersey DEP rule-making authority, where rules concerning ground water quality standards were promulgated. The rules addressee policy with respect to protection and enhancement of ground water re sources, use classification, quality criteria, and the designated uses o ground waters of the state pursuant to the New Jersey Water Pollution Con trol Act and the Water Quality Planning Act. These policy development recognized the close association of ground water and surface water.

The policy calls for nondegradation except where the state chooses t< allow lower water quality as the result of necessary and justifiable economii or social development. In no event, however, may degradation of wate quality interfere with or become injurious to existing designated uses. Also no degradation is allowed in the Central Pine Barrens geographical area. Ii cases where water quality does not meet the listed criteria for a particula use classification owing primarily to human activities, it is the policy of th< DEP to restore the quality to the minimum levels defined for the use classifi cation. When water quality does not conform for natural causes, natura water quality characteristics shall prevail.

The ground water classification system has the following categories:

• Class GW1 ground water, which applies only to the Central Pine Bar rens, shall be suitable for potable water supply, agricultural water supply